

**REMARKS / ARGUMENTS**

I. Status of the Claims

- A. Claims 1 and 13 are Independent Claims.
- B. Claims 1-24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nobuyasu et al. (US Pat. No. 6,597,673) (hereinafter "Nobuyasu").

II. Response to Claim Rejections

- A. Not all the claim limitations are taught by Nobuyasu.

- 1. Evaluating a method is not the same as creating a method.

Having reviewed Examiner's 35 U.S.C. § 102(e) rejections, Applicants believe that Nobuyasu teaches an invention that is different from the Applicants' claimed invention. Briefly, Nobuyasu designs new soft handoff control methods that do not include evaluation of handoff performance metrics. In contrast, Applicants' claimed invention teaches how to calculate handoff performance metrics for an existing class of well-known handoff control methods.

With respect to the rejections on Claims 1 and 13, Nobuyasu does not teach a cellular network handoff modeler or a method for evaluating the performance of cellular network handoff decisions. Rather, Nobuyasu essentially teaches an "optimum soft handoff control method that maximizes channel capacity and, more particularly, a soft handoff method performed so as to maximize channel capacity in dependence upon the soft handoff rate of a base station." See Nobuyasu, col. 3, l. 66 – col. 4, l. 3. Moreover, Nobuyasu provides "a soft handoff control method performed in such a manner that a variation in channel capacity is reduced even if the soft handoff rate of a base station changes." Id. at col. 4, ll. 4-7.

In contrast, the claimed invention relates to “a new discrete-time framework for evaluating the performance of handoff mechanisms such as hard handoff algorithms based on pilot signal strength measurements.” See Specification, para. [0050]. In essence, **evaluating** a soft handoff control method **is not the same as creating** a new soft handoff control method. Furthermore, since the evaluation language should be treated as a claim limitation, such limitation is also not taught in Nobuyasu.

Based on the arguments above, it is now believed that the § 102(e) rejections have been overcome. Applicants respectfully request that such rejections be withdrawn.

2. The preamble of Claim 1 is a claim limitation not taught by Nobuyasu.

Should the Examiner disagree with the points made in Section II.A.1., Applicants direct Examiner's attention to the preamble of Claim 1. The evaluation language used in the preamble of Claim 1 serves as a limitation. It is a necessary element to breathe life, meaning and vitality to the claim. See Preamble, Claim 1.

Because the claimed invention is specifically gearing the scope of the invention towards (a) the evaluation of the performance of cellular network handoff decisions and (b) a framework for carrying out such evaluation, the preamble must be treated as a claim limitation. See MPEP § 211.02 (“Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation.”); see also Bell Comm. Res. Inc. v. Vitalink Comm. Corp., 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995), MPEP § 2111.02 (“[A] claim has the import that the claim as a whole suggests for it.”); Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999), MPEP § 2111.02 (“If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or,

if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim."').

As a limitation of claim 1, Nobuyasu must teach the same limitation to anticipate the claims. See Verdegaal Bros. v. Union Oil Co. of Cal., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), MPEP § 2131 ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.'). However, because such teaching is not present in Nobuyasu, Claim 1 cannot be anticipated by Nobuyasu.

It is therefore the Applicants' opinion that this rejection has been overcome. Applicants now respectfully request that such rejection be withdrawn.

3. The claim limitation in Claims 1 and 13 regarding calculating performance metrics is not taught by Nobuyasu.

As explained above, all the claim limitations must be taught to anticipate a claim. See supra § II.A.2.

Examiner stated that Nobuyasu in column 10, lines 30-46, teaches an arrangement to reduce a decline in channel capacity with respect to a change in soft handoff rate. Examiner believes this teaching is Applicants' point of calculating at least one handoff performance metric along at least one said handoff decision point.

Applicants believe this argument is not quite valid. The claimed invention is different from Nobuyasu in that the former teaches a method of calculating performance metrics for a class of handoff control that is based on hysteresis levels. See id. at paras. [0068] – [000159].

Nowhere in Nobuyasu is such method based on hysteresis levels discussed for any handoff control method.

While similar components may be described, they are not directed to the same method. Nobuyasu's teachings of new soft handoff control methods simply do not equate to the claimed invention's teachings of calculating handoff performance metrics. Therefore, Nobuyasu cannot anticipate the claimed invention.

Applicants respectfully request that these rejections be withdrawn.

B. Dependent Claims 2-12 and 14-24 are believed to be in condition for allowance based upon the arguments presented for Independent Claims 1 and 13.

Since Dependent Claims 2-12 depend upon Independent Claim 1, these claims and their limitations are contained within the base claim 1. Likewise, since Dependent Claims 14-24 depend upon Independent Claim 13, these claims and their limitations also are contained with the base claim 13. Because it is believed that Independent Claims 1 and 13 are now in condition for allowance, withdrawal of these rejections for all dependent claims is respectfully solicited.

### III. Conclusion

For all of the reasons advanced above, Applicants respectfully believe that the application is in condition for allowance, and thus, respectfully request allowance to be granted. If there are any outstanding issues that might be resolved by an interview or an Examiner's Amendment, Applicants request that the Examiner call the Applicants' agents at the telephone number shown below.

The Commissioner is hereby authorized to change any additional fees, which may be required, or credit any overpayment, to Deposit Account No. 50-3212.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely. Hereby, the Commissioner is authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 50-3212.

Respectfully submitted,

/David Yee, Reg. No. 55,753/

David Yee  
Reg. No. 55,753

Date: September 18, 2006

Office of Technology Transfer  
George Mason University  
4400 University Dr., MSN 5G5  
Fairfax, VA 22030  
Phone: 703-993-3949  
Fax: 703-993-8871